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STATE OF MISSOURI

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Jeremy Johnson

## DEPARTMENT OF NATURAL RESOURCES

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October 17, 2002

CERTIFIED MAIL – 7099 3220 0009 3729 5735 RETURN RECEIPT REQUESTED

Mr. Joseph Haake Group Manager The Boeing Company Dept. 464C, Bldg. 220 Mail Code S221-1400 P.O. Box 516 St. Louis, MO 63166-0516

RE: Comments on the Revised RCRA Facility Investigation (RFI) Annual Monitoring Report for SWMU 17 at the Boeing Facility, Hazelwood, Missouri; Permit# MOD00818963

Dear Mr. Haake:

The Missouri Department of Natural Resources' Hazardous Waste Program (HWP) has completed review of the Revised Annual Monitoring Report for SWMU 17 dated September 17, 2002, for SWMU 17. This report summarizes the results of all of the investigations conducted in the SWMU 17 area to date. These results were used to form conclusions and recommendations for further investigation. The department's HWP has several comments that must be addressed by Boeing prior to granting approval of the plans for further investigation at SWMU 17.

## SPECIFIC COMMENTS

1. The proposed revisions to the text on pages 6-9 and 7-4 are acceptable. Discussion of less contaminated wells may be removed from the narrative. This change does not alter the overall interpretation of contamination identified at SWMU 17, therefore, it is not imperative that the lesser detections be discussed. The proposed revision to page 7-6 text

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is unacceptable unless justification for this change is provided. Higher conductivity values were identified at TP-4, which is close to the NaOH Waste Tanks, and could be indicative of releases to groundwater in this area. Based on our telephone conversation of October 2, 2002, the reported conductivity value has been further researched and was found to be erroneous. Please respond by including the correct value in the text and/or include an explanation for the error.

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- 2. Section 7.3 Recommendations for Future Corrective Action, page 7-7. The report states that one monitoring piezometer will be completed east of existing TP-20, and the other borings will be abandoned. This investigation iteration should be designed to complete the delineation of soil and groundwater contamination at SWMU 17. At the completion of the proposed work, there should be adequate "clean" monitoring points downgradient of the contaminant source which can be used for long-term monitoring of the perimeter of the contaminant plume. This may include installing piezomometers and/or monitoring wells inside building 48, or on the other side of the building depending on the results of the upcoming investigation. The work plan should be revised to reflect this objective. In addition, the HWP feels it would be appropriate to add analyses for Total Petroleum Hydrocarbons (TPH) on the east side of the investigation area due to the proximity of TPH contamination that was identified during previous SWMU 17 investigations.
- The work plan suggests that a risk assessment and corrective measures study be completed 3. at SWMU 17 upon completion of the investigation. In most cases, these activities are handled on a facility-wide basis and include all contamination identified during the RFI since potential exposures, and associated assumptions, are normally consistent across the property. Of course, this approach is usually based on the presence of a single property owner/operator. To date, the major areas of concern on the Tract I South property include SWMU 17, GKN Property, USTs at building 41, 45, and 5. In concept, it would seem to be more efficient to address these areas collectively. However, the HWP understands that there may be both a technical (i.e., differing contaminants and exposure potential on portions of the property now owned by different entities) and administrative (i.e., negotiated time frames to address clean-up on city- and GKN-owned properties) bases upon which to use an alternative approach to risk assessment and evaluation of corrective measures. The basis for breaking the site apart for the noted purposes should be clearly articulated in the work plan and any subsequent documents. Further, any risk assessment or corrective measures study for the property now owned by the city should not only address SWMU 17 but must address any other releases related to SWMUs/AOCs that are located on that property if the HWP is to expedite disposition of the issues on that property.

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- 4. Tables 2-1 and 2-2. The Investigative Threshold Limits (ITLs) for soil have been determined in an acceptable manner, however, the ITL table for groundwater needs to be revised. Use of EPA Region V Data Quality Levels from December 1995 in the groundwater ITL table appears to be a remnant of historical ITL development efforts, at which time neither the CALM document nor EPA Region IX Preliminary Rememdiation Goal (PRG) tables had been developed. For groundwater, the EPA Region V values should be replaced with EPA Region IX (PRGs) for groundwater to be consistent with both the HWP's and EPA Region VII's current approach to site investigation screening. In revising the groundwater ITL table, if no MCL or CALM GTARC exists for a particular constituent of concern, then the value for tap water obtained from the EPA Region IX PRG tables should be used. The HWP recognizes that the EPA Region IX tap water values are generally more conservative than MCLs and CALM GTARCs, however, the HWP is only advocating their use in the absence of an MCL or CALM GTARC. In addition, the groundwater and soil constituents listed in the ITL tables should be consistent. If analytes have been detected in one of these two media, it is likely that they could be detected in the other media at some point, either above or below levels of concern. In particular, revision of the groundwater ITL table to include all constituents listed on the soil ITL table is recommended so that these tables need not be revised again if known constituents show up in groundwater above levels of concern. Of course, further ITL table revision will be required if additional constituents are identified during investigation that are not already on the soil and groundwater lists and those constituents are above screening levels obtained from the sources noted on the revised ITL tables.
- 5. Tables 6-4 through 6-6. New tabulated data for groundwater results have been submitted that include detection limits for all nondetections. The same should be done for the soil sampling results in Tables 6-1 through 6-3.
- 6. It appears that Figure 6-1 has been revised to include the subsurface structure discussed in the text. It is unclear why Figures 6-4, 6-6, 6-8, 6-12, and 6-13 have been re-submitted as these figures appear identical to those previously submitted. Please explain how these figures have changed.
- 7. It appears that Figure 7-2 has been revised to ignore the PCE and TCE detections at TP-7. This is not acceptable; the original diagram should be used.

Please revise and resubmit three copies of appropriate portions of the Revised RCRA Facility Investigation (RFI) Annual Monitoring Report for SWMU 17, including the proposed work plan contained therein, to address the foregoing comments within 15 days of receipt of this letter. If you have any questions concerning this comment letter or require any additional information,

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please do not hesitate to contact Mr. Patrick Quinn, Environmental Engineer, at the Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176, or by phone at (573) 751-3553.

Sincerely,

HAZARDOUS WASTE PROGRAM

Patrick Quinn

**Environmental Engineer** 

Permits Section

PQ:mj

c: Ms. Joletta Golik, Airport Authority Mr. Jeremy Johnson, U.S. EPA Region VII

St. Louis Regional Office